

(LG 4271)

FEBRUARY 2015

Sub. Code: 4271

**FOURTH YEAR B.PHARM. EXAMINATION
PAPER V – MEDICINAL CHEMISTRY - II**

Q.P. Code : 564271

Time: Three hours

Maximum: 100 marks

I. Essay:

(2 x 20 = 40)

1. a) What are Sulphonamides? Classify them with structural example of each class.
b) Sketch the synthesis of Sulphamethiazole and Sulphamethoxazole.
c) Explain the mechanism of action of Sulphonamides.
2. a) Define antibiotics. Classify them based on spectrum of activity.
b) Discuss the degradation products of Penicillin.
c) What are semi-synthetic Penicillins? Give their structures and advantages.
d) Write a short note on Chloromycetin.

II. Short notes:

(8 x 5 = 40)

1. Outline the structure and synthesis of Acyclovir and give its mechanism of action.
2. Write a note on anticancer antibiotics and their mechanism of actions.
3. Classify Azole antifungal agents and explain briefly their SAR.
4. Give the structures of any two 1,4- dihydro pyridines as calcium channel blockers and explain their mechanism of action.
5. Write a short note on Glucocorticoids.
6. Discuss briefly about HMG Co- A Inhibitors.
7. Write short notes on synthetic Hypoglycemic agents.
8. Oral contraceptives

III. Short answers:

(10 x 2 = 20)

1. Eugenol
2. Draw any TWO structures of antifungal agents
3. Write uses of Rifampicin
4. Write the synthesis of Metronidazole
5. Classify Anthelmintics with examples
6. Give the structure and medicinal uses of Crotamiton
7. Define Antibiotics and Antibacterial Agents
8. Name any two β -lactamase resistant Penicillins
9. Write the alkaloids used in Cancer treatment.
10. Define Cardiotonics. Give examples
